

- c) an amount of *BstUI* restriction enzyme sufficient to analyze PCR amplimers of said intron 5.

25 (new). The kit of claim 24, wherein one PCR primer has a nucleic acid sequence as set forth in SEQ ID NO:2 and the other PCR primer has a nucleic acid sequence as set forth in SEQ ID NO:3.

26 (new). A method of diagnosing osteoporosis or predisposition to osteoporosis in a human, said method comprising the step of:

determining whether a *BstUI* restriction site is present or absent in intron 5 of a TGF- β 1 gene of the human.

27 (new). The method of claim 26, further comprising the step of amplifying said intron 5 prior to the determining step.

28 (new). A method of determining risk of fracture in a human, said method comprising the step of:

determining whether a *BstUI* restriction site is present or absent in intron 5 of a TGF- β 1 gene of the human.

29 (new). The method of claim 28, further comprising the step of amplifying said intron 5 prior to the determining step.